EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Jonathan Thomas on 4/20/2009.

The application has been amended as follows:

8. (Currently amended) A method of manipulating a 3D image using a peripheral device

connected to a display monitor and processor, said peripheral device including a gripping device,

comprising the steps of:

displaying a 3D image on said display monitor,

detecting forces and/or displacements, upon said gripping device by the user, wherein

said gripping device including forming sensors, said forming sensors detecting movement in six

degrees of freedom, said six degrees of freedom including a first operating mode of x, y and z

parameters forming translation components for translating or zooming the 3D image and a

second operating mode of A, B and C parameters forming rotation components for rotating the

3D image,

generating command information from said gripping device of said peripheral device to

said processor based upon said forces and/or displacements, and thus

manipulating the 3D images using only one of either of said first operating mode or said second operating mode,

wherein a comparison is used on the combined components to identify components that negligible or small relative to the other components and as a result of the comparison the component(s) thus identified are replaced by a zero component; and

wherein at least one rotation component at least one translation component are combined and the combined component(s) thus obtained is (are) utilized as rotation component(s) in said first operating mode and as translation component(s) in said second operating mode, and further wherein at least one combination of components is a linear combination.

9. (Currently amended) The method as claimed in claim ~~7~~ 8, wherein a combined component is replaced by a zero component when the component is less than a given ratio of at least one other component.

10. (Original) The method as claimed in claim 8, wherein a combined component is replaced by a zero component when the component is less than a given ratio of at least one other component.

11. (Original) The method as claimed in claim 9, wherein a combined component is replaced by a zero component when the component is less than half of at least one other component.

12. (Current amended) A method of manipulating a 3D image using a peripheral device connected to a display monitor and processor, said peripheral device including a gripping device, comprising the steps of:

displaying a 3D image on said display monitor,

detecting forces and/or displacement, upon said gripping device by the user, wherein said gripping device including forming sensors, said forming sensors detecting movement in six degrees of freedom, said six degrees of freedom including a first operating mode of x, y and z parameters forming translation components for translating or zooming the 3D image and a second operating mode of A, B and C parameters forming rotation components of rotating the 3D image,

generating command information from said gripping device of said peripheral device to said processor based upon said forces and/or displacement, and thus

manipulating the 3D images using only one of either of said operating mode or said second operating mode; and

wherein at least one rotation component at least one translation component are combined and the combined component(s) thus obtained is (are) utilized as rotation component(s) in said first operating mode and as translation component(s) in said second operating mode, and further wherein at least one combination of components is a linear combination.

13. (Current amended) A method of manipulating a 3D image using a peripheral device connected to a display monitor and processor, said peripheral device including a gripping device, comprising the steps of:

displaying a 3D image on said display monitor,

detecting forces and/or displacement, upon said gripping device by the user, wherein said

gripping device including forming sensors, said forming sensors detecting movement in six

degrees of freedom, said six degrees of freedom including a first operating mode of x, y and z

parameters forming translation components for translating or zooming the 3D image and a

second operating mode of A, B and C parameters forming rotation components of rotating the

3D image,

generating command information from said gripping device of said peripheral device to

said processor based upon said forces and/or displacement, and thus

manipulating the 3D images using only one of either of said operating mode or said

second operating mode,

filtering the command information for the rotation and/or translation components

corresponding to micro-movements, wherein in the second operating mode, after filtering of the

micro-movements, whether the zoom component is zero or not is detected and when the zoom

component is not zero, the other components are replaced by zero components; and

wherein at least one rotation component at least one translation component are combined

and the combined component(s) thus obtained is (are) utilized as rotation component(s) in said

first operating mode and as translation component(s) in said second operating mode, and further

wherein at least one combination of components is a linear combination.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is (571)272-7697. The examiner can normally be reached on Monday-Thursday from 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571)272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/KMN/
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